

Name _____

Date _____

Maths vocabulary — answers

46 tasks in five styles, covering every key word in Unit 1.

A · Unscramble the term — Rearrange the letters to make the term that matches the definition.

1 rnieteg

A positive or negative whole number, including zero.

Example: -7 , 0 and 43 are integers; 2.5 is not.

Answer: integer

The word is **integer** — A positive or negative whole number, including zero.

2 trpdocu

The result of multiplying numbers together.

Example: The product of -3 and 4 is -12 .

Answer: product

The word is **product** — The result of multiplying numbers together.

3 oafter

A number that divides exactly into another number without any remainder.

Example: $15 \div 5 = 3$, so 5 is a factor of 15 .

Answer: factor

The word is **factor** — A number that divides exactly into another number without any remainder.

4 lumtlpie

The result of multiplying a number by a whole number.

Example: The multiples of 4 are 4 , 8 , 12 , 16 , ...

Answer: multiple

The word is **multiple** — The result of multiplying a number by a whole number.

5 reramnied

The amount left over after a division.

Example: $17 \div 5 = 3$ remainder 2 .

Answer: remainder

The word is **remainder** — The amount left over after a division.

6 eividislb

When one number is divided by another, the result is an integer.

Example: 342 is divisible by 3 .

Answer: divisible

The word is **divisible** — When one number is divided by another, the result is an integer.

7 tidig

One of the symbols 0 to 9 used to write a number.

Example: The number 342 has three digits.

Answer: digit

The word is **digit** — One of the symbols 0 to 9 used to write a number.

8 xnied

The small raised number that shows how many times a number is multiplied by itself.

Example: In 7^2 the index is 2, and $7^2 = 49$.

Answer: index

The word is **index** — The small raised number that shows how many times a number is multiplied by itself.

9 tseitame

To find an approximate value that is close enough to be useful.

Example: $\sqrt{50}$ is about 7.

Answer: estimate

The word is **estimate** — To find an approximate value that is close enough to be useful.

10 eocsncetuvi

Describes numbers that are next to each other when placed in order.

Example: 7, 8 and 9 are consecutive.

Answer: consecutive

The word is **consecutive** — Describes numbers that are next to each other when placed in order.

B · Fill in the gaps — Use a word from the box to complete each sentence.

- 11** Any whole number that has a remainder when divided by 2 is an _____.

Word box: □

Answer: odd number

7, 9 and 11 all leave remainder 1 when divided by 2.

- 12** Numbers that are next to each other when placed in order are _____ numbers.

Word box: □

Answer: consecutive

For example 14, 15 and 16.

- 13** _____ means that when one number is divided by another, the result is an integer.

Word box: □

Answer: divisible

$342 \div 3 = 114$, an integer, so 342 is divisible by 3.

- 14** You can use the _____ to quickly check if one number is divisible by another.

Word box: □

Answer: tests of divisibility

For example, add the digits to test for 3 and 9.

- 15** Two numbers whose only common factor is 1 are called _____.

Word box: □

Answer: co-prime

9 and 20 are co-prime.

- 16** The answer to a division is called the _____.
Word box: □
Answer: quotient
 The quotient of -48 and 6 is -8 .
- 17** The small raised 2 in 7^2 is called the _____.
Word box: □
Answer: index
 It shows that 7 is multiplied by itself twice.
- 18** When a number is not a square number you can _____ its square root.
Word box: □
Answer: estimate
 $\sqrt{50}$ lies between 7 and 8.

C · Choose the correct ending — Pick the reason that correctly finishes each sentence.

- 19** You know that $5 \times 3 = 15$ is a multiplication because ...
☐ 15 is bigger than both 3 and 5
☐ it is not an addition
☐ $\times$ is the symbol for multiplication
Answer: $\times$ is the symbol for multiplication
 The symbol tells you which operation is being carried out.
- 20** 5 and 10 are common factors of 30 and 50 because ...
☐ 30 and 50 are both multiples of 10
☐ they both divide into 30 and 50 without any remainders
☐ no other numbers divide into 30 and 50
Answer: they both divide into 30 and 50 without any remainders
 A common factor must divide exactly into *both* numbers.
- 21** 4 is the square root of 16 because ...
☐ 16 is divisible by 4
☐ you find both 4 and 16 in the 4 times table
☐ 4 multiplied by itself is 16
Answer: 4 multiplied by itself is 16
 A square root is the number that was multiplied by itself.
- 22** 4 is the cube root of 64 because ...
☐ 4 times 16 is 64
☐ 4 times 4 is 16 and multiplying by 4 again gives 64
☐ 64 can be divided by 4 but not by 6
Answer: 4 times 4 is 16 and multiplying by 4 again gives 64
 A cube root is the number multiplied by itself three times.
- 23** 12 is the lowest common multiple of 4 and 6 because ...
☐ 12 is in the 4 times table
☐ 12 is the smallest number in both times tables
☐ 12 is $4 + 6 + 2$
Answer: 12 is the smallest number in both times tables
 The LCM must be common to both, and the smallest such number.

- 24 $-3 \times -4 = 12$ is positive because ...
- ☐ a minus and a minus make a plus in every calculation
 - ☐ there is an even number of negative factors
 - ☐ 12 is bigger than both 3 and 4

Answer: there is an even number of negative factors

Two negatives here — an even number — so the product is positive. Note that the same is *not* true for addition: $-3 + -4 = -7$.

- 25 342 is divisible by 3 because ...
- ☐ it is an even number
 - ☐ its digits add up to 9, which is a multiple of 3
 - ☐ it ends in a 2

Answer: its digits add up to 9, which is a multiple of 3

That is the digit-sum test for 3.

- 26 9 and 20 are co-prime because ...
- ☐ they are both odd numbers
 - ☐ their only common factor is 1
 - ☐ 9 is smaller than 20

Answer: their only common factor is 1

Co-prime numbers share no factor except 1. (Note 20 is not odd.)

D · Match the definition — Type the term that matches each definition.

- 27 Which term means: *The result of adding numbers together.*

Answer: sum

sum — The sum of 4 and -9 is -5 .

- 28 Which term means: *The result of subtracting one number from another.*

Answer: difference

difference — The difference between 4 and -9 is 13.

- 29 Which term means: *The result of multiplying numbers together.*

Answer: product

product — The product of -3 and 4 is -12 .

- 30 Which term means: *The result of a division.*

Answer: quotient

quotient — The quotient of -48 and 6 is -8 .

- 31 Which term means: *A number that is a multiple of two or more numbers.*

Answer: common multiple

common multiple — 24 is a common multiple of 4 and 6.

- 32 Which term means: *The largest number that is a factor of two or more numbers.*

Answer: highest common factor

highest common factor — The HCF of 12 and 18 is 6.

- 33 Which term means: *The number you get when you multiply an integer by itself.*

Answer: square number

square number — $5 \times 5 = 25$, so 25 is a square number.

- 34** Which term means: *The number that was cubed to give a cube number.*
Answer: cube root
cube root — $\sqrt[3]{27} = 3$.
- 35** Which term means: *To give evidence or a reason that shows why an answer is correct.*
Answer: justify
justify — Justify your answer by showing the digit sum.
- 36** Which term means: *The amount left over after a division.*
Answer: remainder
remainder — $17 \div 5 = 3$ remainder 2.
- 37** Which term means: *Any whole number that can be divided by 2 without a remainder.*
Answer: even number
even number — 4 is even; 5 is not.
- 38** Which term means: *The smallest number that is a multiple of two or more numbers.*
Answer: lowest common multiple
lowest common multiple — The LCM of 4 and 6 is 12.

E · Reading and writing maths — Say and interpret mathematical language correctly.

- 39** How do you read 7^2 aloud?
☐ seven two
☐ seven squared
☐ seven cubed
☐ square seven
Answer: seven squared
An index of 2 is read as “squared”.
- 40** How do you read 4^3 aloud?
☐ four three
☐ four squared
☐ four cubed
☐ cube four
Answer: four cubed
An index of 3 is read as “cubed”.
- 41** How do you read $\sqrt{49}$ aloud?
☐ root forty-nine squared
☐ the square root of forty-nine
☐ forty-nine squared
☐ the cube root of forty-nine
Answer: the square root of forty-nine
The symbol $\sqrt{}$ is read as “the square root of”.

42 How do you read -8 aloud in mathematics?

- ☐ minus eight
- ☐ negative eight
- ☐ either “negative eight” or “minus eight”
- ☐ eight minus

Answer: either “negative eight” or “minus eight”

Both are used. “Negative eight” makes it clear you mean the number, not the operation of subtracting.

43 In the sentence “find the product of -3 and 4 ”, which operation should you use?

- ☐ Addition
- ☐ Subtraction
- ☐ Multiplication
- ☐ Division

Answer: Multiplication

“Product” always means multiply: $-3 \times 4 = -12$.

44 In the sentence “find the difference between 4 and -9 ”, which operation should you use?

- ☐ Addition
- ☐ Subtraction
- ☐ Multiplication
- ☐ Division

Answer: Subtraction

“Difference” means subtract: $4 - (-9) = 13$.

45 A question says “justify your answer”. What must you include?

- ☐ Only the final number
- ☐ A reason or evidence that shows why you are right
- ☐ A drawing
- ☐ Your working crossed out

Answer: A reason or evidence that shows why you are right

To justify is to give evidence — for example quoting the digit sum.

46 A question says “estimate $\sqrt{83}$ ”. What kind of answer is wanted?

- ☐ An exact decimal
- ☐ A rough value, close enough to be useful
- ☐ The number 83
- ☐ A fraction

Answer: A rough value, close enough to be useful

$81 < 83 < 100$, so $\sqrt{83}$ is a little over 9 .